

What is claimed is:

1 1. A semiconductor body, comprising:
2 an alignment mark comprising a pair of sets of parallel lines disposed
3 on the semiconductor body, the parallel lines in one of the sets being disposed
4 orthogonal to the parallel lines in the other one of the sets, the two sets of
5 parallel lines being in an overlaying relationship.

1 2. A semiconductor body, comprising:
2 an alignment mark comprising a pair of sets of parallel lines disposed
3 on the semiconductor body, the parallel lines in one of the sets being disposed
4 orthogonal to the parallel lines in the other one of the sets, the parallel lines in
5 the one of the sets crossing the parallel lines in the other one of the sets.

1 3. A method for detecting an alignment mark on a semiconductor
2 body, comprising:
3 providing the alignment mark on the semiconductor body, such
4 alignment mark comprising a pair of sets of parallel lines disposed on the
5 semiconductor body, the parallel lines in one of the sets being disposed
6 orthogonal to the parallel lines in the other one of the set, the two sets of parallel
7 lines being in an overlaying relationship;
8 scanning an alignment illumination comprising a pair of orthogonal,
9 lines of impinging light over the surface of the alignment mark, one of such pair
10 of impinging light lines being orthogonal to, and laterally displaced from, the
11 other one of such pair of impinging light lines, impinging light being reflected by
12 the alignment lines in the surface of the semiconductor when such impinging
13 light is over to provide a pair of laterally displaced beams of reflected light; and
14 detecting in a each one of a pair of laterally spaced detectors a
15 corresponding one of the laterally displaced beams of reflected light.

1 4. Apparatus for detecting an alignment mark on a semiconductor
2 body, such alignment mark, such alignment mark comprising a pair of sets of
3 parallel lines disposed on the semiconductor body, the parallel lines in one of
4 the sets being disposed orthogonal to the parallel lines in the other one of the
5 set, the two sets of parallel lines being in an overlaying relationship, such
6 apparatus comprising:
7 an optical system for scanning an alignment illumination comprising a
8 pair of orthogonal, lines of impinging light over the surface of the alignment
9 mark, one of such pair of impinging light lines being orthogonal to, and laterally
10 displaced from, the other one of such pair of impinging light lines, impinging light
11 being reflected by the alignment lines in the surface of the semiconductor when
12 such impinging light is over to provide a pair of laterally displaced beams of
13 reflected light; and
14 a pair of laterally spaced detectors, each one of the detectors being
15 positioned to detect a corresponding one of the laterally displaced beams of
16 reflected light.